



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,597	07/20/2001	Emiko Sekimoto	09792909-5093	3291

33448 7590 09/28/2004

ROBERT J. DEPKE LEWIS T. STEADMAN
HOLLAND & KNIGHT LLC
131 SOUTH DEARBORN
30TH FLOOR
CHICAGO, IL 60603

EXAMINER

GRAYBILL, DAVID E

ART UNIT PAPER NUMBER

2822

DATE MAILED: 09/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/909,597

Applicant(s)

SEKIMOTO, EMIKO

Examiner

David E Graybill

Art Unit

2822

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The unenabled subject matter is the negative limitations in claims 1, 3 and 5, "wherein neither line is located at a center line of the device, such that it is perpendicular to any of the primary side walls," "neither line is located at a center line of the device which is perpendicular to the primary side walls," and, "neither line is located at a center line of the device which is perpendicular to the primary side walls," respectively. Any negative limitation or exclusionary proviso must have basis in the original disclosure. See *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983) *aff'd mem.*, 738 F.2d 453 (Fed. Cir. 1984). The mere absence of a positive recitation is not basis for an exclusion.

In the rejections *infra*, reference labels are generally recited only for the first recitation of identical claim language.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1, 3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Arai (5686758).

At column 9, line 64 to column 10, line 62, Arai teaches the following:

1. A package for containing semiconductor element comprising:
a housing 45 containing a semiconductor element, and a pair of positioning holes 53 and a pair of attaching holes 52 respectively provided at opposed side portions of said housing, wherein a line between said pair of positioning holes and a line between said pair of attaching holes intersect with each other substantially at a center of said package and further wherein the line between the positioning holes is skewed with respect to each of four primary side walls (the four longest sides illustrated not labeled) of the housing and the line between the attaching holes is skewed with respect to each of the four primary side walls such that the line between the positioning holes and the line between the attaching holes are each neither parallel nor perpendicular to any of the primary side walls, and further wherein neither

Art Unit: 2822

line is located at a center line of the device, such that it is perpendicular to any of the primary side walls.

3. A semiconductor device comprising: a semiconductor element 40; a housing for containing said semiconductor element, and a pair of positioning holes and a pair of attaching holes respectively provided at opposed side portions of said housing; wherein a line between the pair of positioning holes and a line between said pair of attaching holes intersect with each other substantially at a center of said package and further wherein the line between the positioning holes is skewed with respect to each of four primary side walls of the housing and the line between the attaching holes is skewed with respect to each of four primary side walls such that the line between the positioning holes and the line between the attaching holes are each neither parallel nor perpendicular to any of the primary side walls, and neither line is located at a center line of the device which is perpendicular to the primary side walls.

5. A semiconductor device comprising: a semiconductor element; a housing having a recess portion for containing said semiconductor element, a pair of attaching holes provided at opposed side portions of said housing at a surface of said package; and a transparent member 48 for sealing said semiconductor element in said recess portion; wherein said surface of said housing is made to be higher than a top surface of said

transparent member, and further wherein a line between the pair of positioning holes and a line between said pair of attaching holes intersect with each other substantially at a center of said package and further wherein the line between the positioning holes is skewed with respect to each of four primary side walls of the housing and the line between the attaching holes is skewed with respect to any of the primary side walls such that the line between the positioning holes and the line between the attaching holes are each neither parallel nor perpendicular to either of the primary side walls and, neither line is located at a center line of the device which is perpendicular to the primary side walls..

Note: The illustrated centerlines (not labeled) of Arai do not necessarily coincide with the instant claimed lines, and Arai is not necessarily relied on for the teaching of the illustrated centerlines.

Although Arai does not appear to explicitly teach wherein a line between said pair of positioning holes and a line between said pair of attaching holes intersect with each other substantially at a center of said package and further wherein the line between the positioning holes is skewed with respect to each of four primary side walls of the housing and the line between the attaching holes is skewed with respect to any of the primary side walls, and further wherein neither line is located at a center line of the device, such that it is perpendicular to any of the primary side walls,

these are inherent limitations of the package of Arai. To further clarify, it is inherent that a straight or curved geometric element that is generated by a moving point and that has extension only along the path of the point, i.e., a line, can be generated between the positioning holes that is skewed with respect to each of the side walls of the housing, and it is inherent that a straight or curved geometric element that is generated by a moving point and that has extension only along the path of the point, i.e., a line, can be generated between the attaching holes that is skewed with respect to each of the side walls, wherein neither line is located at a center line of the device, such that it is perpendicular to any of the primary side walls. To continue to afford applicant the benefit of compact prosecution, it is noted that the scope of the instant claims is not limited to straight lines, nor to lines drawn from the centers of the holes.

To further clarify the teaching of a transparent member, the member inherently allows the passage of radiation; for example, infrared radiation, therefore, it is transparent at least to infrared radiation.

To further clarify the teaching that the surface of the housing is made to be higher than a top surface of the transparent member, it is noted that the scope of the claims is not limited to a particular frame of reference. In addition, the surface of the housing abuts and extends beyond a surface of the transparent member. Therefore, it is inherent that there is a frame of

reference wherein the abutting surface of the transparent member is a top surface, and the further extending surface of the housing is made to be higher than the top surface.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai as applied to claims 1, 3 and 5, and further in combination with Kondoh (5448114).

Arai does not appear to explicitly teach the following:

2. The package according to 1: wherein said semiconductor element is a solid-state imaging element.
4. The semiconductor device according to 3, wherein said semiconductor element is a solid-state imaging element.
6. The semiconductor device according to claim 5, wherein said semiconductor element is a solid-state imaging element.

Nonetheless, at column 3, lines 1-13, Kondoh teaches wherein a semiconductor element 1 is a solid-state imaging element, and a transparent member 21. Moreover, it would have been obvious to combine the product

of Kondoh with the product of Arai because it would provide the semiconductor element of Arai and a transparent member.

Applicant's amendment and remarks filed 6-28-4 have been fully considered, and are adequately addressed in the rejections supra.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

For information on the status of this application applicant should check PAIR:

Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alternatively, applicant may contact the File Information Unit at (703) 308-2733. Telephone status inquiries should not be directed to the examiner. See MPEP 1730VIC, MPEP 203.08 and MPEP 102.

Application/Control Number: 09/909,597

Page 9

Art Unit: 2822

Any other telephone inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Graybill at (571) 272-1930. Regular office hours:

Monday through Friday, 8:30 a.m. to 6:00 p.m.

The fax phone number for group 2800 is (703) 872-9306.

A handwritten signature in black ink, appearing to read 'David E. Graybill', is positioned above the printed name.

David E. Graybill
Primary Examiner
Art Unit 2827

D.G.

22-Sep-04